

# Master of Science in Security Informatics (MSSI) Information Security Institute (JHUISI) The Johns Hopkins University

Securing cyberspace and our national information infrastructure is now more important than ever before, and can be achieved only when the core technology, legal and policy issues are adequately addressed.

The Johns Hopkins University Information Security Institute (JHUISI) in the Whiting School of Engineering (WSE) is the University's focal point for research and education in information security, assurance and privacy. Its proximity to the national capital and fully-fledged connections with federal agencies, key R&D institutions, and diverse industrial sectors have provided the ideal breeding ground of the best thoughts in IT, management and policy fields. The University, through JHUISI's leadership, has been designated as a Center of Academic Excellence in Information Assurance in Research and Education by the National Security Agency.

Through our broad range of educational opportunities, including a ground-breaking graduate program and leading-edge research in foundational science and applied technologies, JHUISI is making a significant impact in the region and nationwide. Our research in mobile and wireless, systems evaluation, medical privacy and electronic voting, among other areas is widely recognized among academics and policy-makers.

- JHUISI is a participant in the Strategic Health IT Advanced Research Projects (SHARP) program for the U.S. Department of Health & Human Services, working on applying attribute-based encryption to protect privacy of electronic medical records. (sharps.org)
- ACCURATE is a multi-institution voting research center funded by the National Science Foundation to research how technology can be used to improve voting systems and the voting process. (accurate-voting.org)

Moreover, JHUISI is instrumental in homeland security research and educational efforts across Johns Hopkins, including emergency health preparedness, bio-terrorism and national security.

## The Master of Science in Security Informatics (MSSI) Program

The Information Security field is rapidly expanding, offering an exciting career combining aspects of Computer Science, Computer Engineering, Information Technology, Policy, and other applied disciplines. Conversely, the private sector around the world and the U.S. Federal Government are actively seeking uniquely qualified students who can assist with their security-related challenges.

The flagship educational experience offered by Johns Hopkins University in the area of information security and assurance is represented by the Master of Science in Security Informatics (MSSI) degree at JHUISI. The MSSI is a full-time, immersive, 3-semester program that is committed to a comprehensive approach with interaction and collaboration among academia, industry and government.

- Core courses that span the technology, policy, health, and management topics, including Security and Privacy, Cryptography, Computer Forensics, Software Vulnerability Analysis, Intrusion Detection, Healthcare Security Management, Rights in Digital Age, Financial Issues in Managing a Secure Operation, and many advanced topics.
- Under close guidance of the faculty, elective courses available from the Homewood campus, the medical and health facilities in east Baltimore, the parttime graduate programs at the Applied Physics Laboratory (APL), and the Paul H. Nitze School of Advanced International Studies (SAIS) and the Zanvyl Krieger School of Arts and Sciences (KSAS) facilities in Washington, D.C., to complement the unique background and interests of individual students.
- Nationally the first such program to cover information security issues in healthcare systems, supported by the world class medical and health education and research at Johns Hopkins.
- The over 15 full-time, part-time, and adjunct faculty members represent recognized scholars and researchers in security, privacy and healthcare, and experienced practitioners from legal and business firms.

JHUISI and MSSI have been well connected with the regional and national employers from government agencies and industries. Graduates of the program are now among the technical leaders in many industry and government institutions.

- Technical and business leaders and Alumni are regularly invited to present the latest developments to the MSSI students in the weekly technology and recruitment seminar series through the whole academic year.
- The Johns Hopkins University has one of the largest and closely knitted alumni networks in the world. Recruitment events and opportunities run constantly with the help of the Career Center on campus.

#### **Dual and Joint Degree Program Opportunities**

Working with other departments of Johns Hopkins University, JHUISI has developed several dual and joint degree programs. Through a rigorous screening process and an intensive program of study, these programs provide those students of great potential with opportunities to accelerate their educational path, including:

- Dual Masters Program (DMP) of the MSSI and the Master of Science in Engineering in Computer Science (MSECS) offered by the Department of Computer Science
- DMP of the MSSI and the masters program in the Department of Applied Math and Statistics
- DMP of the MSSI and the Master of Health Sciences (MHS) program in the Bloomberg School of Public Health
- Joint MSSI Degree and Certificate in National Security in the Krieger School of Advanced Academic Program

For more information please visit: http://isi.jhu.edu/mssi/dual\_degree\_opportunities

### **Scholarship Opportunities**

In addition to the multiple opportunities on the Johns Hopkins campus that provide paid research as well as working experiences, the MSSI program provides several unique scholarships to qualified students.

- National Science Foundation Scholarship for Service (SFS) awards full tuition, a living stipend, health insurance and books to qualified U.S. citizens in return for competitively-paid federal service after graduation and during the summer after the first year of study. To find out more please visit: https://www.sfs.opm.gov/
- Department of Defense Information Assurance Scholarship Program (IASP) is designed to assist in recruiting and retaining highly qualified personnel to meet the U.S. Department of Defense (DoD) information technology requirements for national defense and the security of its information infrastructure. It awards stipends plus support for tuition and fees, and room and board. The students will be required to work for a DoD agency as a civilian employee for up to two years upon graduation. To find out more please visit: <a href="http://dodcio.defense.gov/Home/initiatives/InformationAssuranceScholarshipProgramIASP.aspx">http://dodcio.defense.gov/Home/initiatives/InformationAssuranceScholarshipProgramIASP.aspx</a>

### **Admission to the MSSI Program**

This program is open to outstanding candidates who hold a bachelor's degree with sufficient technical exposure to information technology as preparation for the core technology courses. Those interested in applying to the MSSI Program may do so through our on-line application system: <a href="https://app.applyyourself.com/?id=jhu-grad">https://app.applyyourself.com/?id=jhu-grad</a>

## **Application Deadlines:**

- Fall Second Friday in May for U.S. Citizens and Permanent Residents (January 1<sup>st</sup> for U.S. Citizens interested in applying for IASP or SFS Scholarships); Last Friday in January for International applicants.
- Spring Second Friday in December for U.S. Citizens and Permanent Residents;
   Second Friday in September for International applicants.

We encourage all prospective students to apply as early as possible. Please be sure to include your individual GRE (all students) and TOEFL/IELTS (International Students) scores. The GRE Subject Test is not required. You may send hardcopy or electronic copies. The institution code for both GRE and TOEFL is 5332. The department code is 0404 for GRE and 78 for TOEFL. The preferred scores are as follows:

- GRE General Test Verbal: 160(86%), Quantitative: 148 (44%), Analytical: 4.0.
- TOEFL Test: 79 or IELTS Test: 7.0 (For International applicants only).

Besides the required online application, we require the following original documents: a Statement of Purpose, two (2) letters of recommendation, GRE test results, transcripts and TOEFL scores (for international students). Please mail your supporting documents to:

The Graduate Admissions Office
Johns Hopkins University
Full time Graduate Studies in Arts and Sciences
28 Shriver Hall
3400 N. Charles Street
Baltimore, MD 21218

Please visit our website (<a href="http://isi.jhu.edu/">http://isi.jhu.edu/</a>) for more information about the program or feel free to call our office so that we can discuss your possible application and admittance into our program. Questions regarding the admission can also be sent via email to: <a href="mailto:jhuisi-admissions@jhu.edu">jhuisi-admissions@jhu.edu</a>.

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